

REMARKS

Claims 1 and 3-10 continue to be pending in this patent application. Claims 7-10, drawn to a non-elected invention, stand withdrawn from further consideration.

In this paper, Applicant is proposing to amend claim 1. Support for the amendments to claim 1 can be found in the single drawing figure in the application as filed.

ENTRY OF AMENDMENTS TO CLAIMS

The amendments to claim 1 proposed in this paper, clarify the recitation of the outflow and of the chamber access door of the cleaning and disinfecting machine used in the practice of the claimed method. Applicant submits that the proposed amendments to claim 1 merely sharpen the allowable distinctions of the claimed method from the prior art and do not present new issues for consideration by the Examiner. Because the claims are allowable, for reasons presented below, Applicant respectfully requests that these amendments to claim 1 be entered. Alternatively, Applicant respectfully requests that the amendments to claim 1 be entered for purposed of appeal, if an appeal to the Board of Patent Appeals and Interferences should become necessary.

PRIOR ART REJECTION I

Claims 1, 3 and 5 were rejected under 35 USC § 103(a) as being unpatentable over EP 0 679 406 A1 (Berendsen) in view of US 6290558 B1 (Erickson) and WO 00/59533 (McPhail). Applicant traverses this rejection.

The method disclosed and claimed in this patent application incorporates a combination of steps whereby soiled items in a closed chamber are automatically cleaned, disinfected and dried. The items in the chamber are disinfected by heat and then cooled and dried using air. The use of air for cooling and drying of cleaned items in the chamber reduces water consumption and prevents recontamination of the cleaned items. Before the chamber door is opened for removal of the cleaned items, the exhaust air is conveyed via an exhaust air duct with an exhaust air valve into the outflow from the chamber at a location downstream of a siphon bend. When the chamber door is opened, gases released from the chamber to the surroundings are relatively cool and do

not present a danger to nearby personnel. Since the exhaust gases are conveyed via an exhaust air duct with an exhaust air valve to a location downstream of a siphon bend in the outflow from the chamber, odorous gases that might have accumulated in the chamber are prevented from being released to the surroundings. These attributes of the disclosed and claimed method cannot be realized in known cleaning apparatuses.

The method and apparatus disclosed by Berendsen is specifically designed for the cleaning of pneumatically powered dental tools. These tools have a small volume passages that that require sterilization; they do not contain large quantities of liquid waste, as it is the case with items such as bedpans etc., which can be cleaned by the method of the present invention. In the apparatus disclosed by Berendsen, tubes carrying supplies of cleaning and drying agents are coupled with small individual passages in the tools via couplings A₁, A₂, A₃, ... An in the rear wall of a bowl 7 disposed behind lid 8 of cupboard 3. The Berendsen and method and apparatus cannot be fairly characterized as effecting the cleaning of items disposed in a chamber with a door.

As acknowledged by the Examiner on page 4 of the Office Action, there is no disclosure in Berendsen of conveying air out of the closed chamber through an exhaust air duct having an exhaust air valve and into an outflow having a siphon bend at a location downstream of the siphon bend.

The Examiner characterizes Erickson as belonging to "an analogous art of fluid flow devices" and teaching "a method wherein an outflow contains a siphon bend and an exhaust duct opens into the outflow at a location downstream of the siphon bend (figure 7; col. 5, line 60 - col. 6, line 10) in order to mix the output streams efficiently (col. 6, lines 11-35)." The Examiner contends, "Therefore it would have been obvious to one having ordinary skill in the art at the time of invention to have provided a method wherein the outflow contains a siphon bend and the exhaust duct opens into the outflow at a location downstream of the siphon bend in the method of Berendsen '406, in view of Erickson '558, in order to mix the output streams efficiently."

What the Examiner does not say is that the siphon bend disclosed by Erickson is used in an exhaust elbow in the exhaust system of a marine propulsion engine, that the "output streams" are formed by cooling water and exhaust gases from the engine and that the siphon bend is used

prevent the backflow of water into the engine. The teachings in Erickson are obviously far afield from, and not analogous with, the technology employed in the cleaning method and apparatus disclosed by Berendsen, and Applicant submits that the teachings in Erickson cannot be reasonably viewed as obviously applicable to the Berendsen method as the Examiner contends. *If this rejection is going to be maintained*, Applicant respectfully requests that the Examiner fully explain how the exhaust elbow used by Erickson in a marine propulsion engine can be fairly regarded as being analogous with and obviously applicable to the cleaning method and apparatus taught by Berendsen.

On page 4 of the Office Action, the Examiner acknowledges that "The combination of Berendsen '406 and Erickson '558 does not teach a method wherein the exhaust duct has an exhaust valve and wherein the exhaust valve conveys air from the device."

The Examiner characterizes McPhail as belonging to "the analogous art of sterilization devices" and teaching "a method wherein an exhaust duct contains an exhaust valve (122 of figure 8; pg 13, lines 1-5) and the exhaust valve conveys air from the device (pg 13, lines 1-5) in order to regulate the pressure in the device (pg 13, lines 1-5)." The Examiner contends, "Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have provided a method as claimed in view of Berendsen '406 and Erickson '558, in further view of McPhail '553, in order to regulate the pressure in the device."

While McPhail does teach a valve used to control flow through an exhaust passage that conducts gases from the chamber of a sterilizer, Applicant notes that the disclosure in McPhail cannot cure any of the deficiencies in the Berendsen and Erickson disclosures vis-à-vis the requirements of Applicant's claim 1, as discussed above. Accordingly, no reasonable combination of the disclosures in Berendsen, Erickson and McPhail could yield a method that could satisfy the requirements for the method recited in claim 1.

In view of the foregoing observations and arguments, Applicant submits that no reasonable combination of the disclosures in Berendsen, Erickson and McPhail can properly serve as a basis for rejecting independent claim 1 and dependent claims 3 and 5 under 35 USC § 103(a). Applicant therefore requests that this rejection be withdrawn.

PRIOR ART REJECTION II

Claims 4 and 6 were rejected under 35 USC § 103(a) as being unpatentable over Berendsen, Erickson and McPhail and further in view of US 5225160 (Sanford). Applicant traverses this rejection.

On page 6 of the Office Action, the Examiner acknowledges that the disclosures in Berendsen, Erickson and McPhail "do not specify the use of ambient air for the cooling of objects; rather, it specifies the use of compressed air."

The Examiner characterizes Berendsen as teaching "that flushing through air accelerates the cleaning process by discharging condensation and residual heat" and characterizes Sanford et al. as teaching "the circulation of ambient air in cooling objects after steam sterilization (col. 5, lines 3-7) as an equivalent method of accelerating the cleaning process." The Examiner contends, "it would have been obvious to one having ordinary skill in the art at the time the invention was made to circulate the ambient air of Stanford '1 60, as an alternative equivalent in the method of Berendsen '406, Erickson '558, and McPhail '553, in order to accelerate the cleaning process."

Without acquiescing in the Examiner's proposal to modify the proposed Berendsen-Erickson-McPhail method to incorporate teachings from Sanford, Applicant notes that there are no teachings in Sanford that can remedy deficiencies in the Berendsen, Erickson and McPhail disclosures vis-à-vis the requirements of Applicant's independent claim 1, as explained above. Accordingly, no reasonable combination of the disclosures in Berendsen, Erickson, McPhail and Sanford could yield a method that could satisfy the requirements for the method recited in claim 1 and dependent claims 4 and 6.

In view of the foregoing observations and arguments, Applicant submits that no reasonable combination of the disclosures in Berendsen, Erickson, McPhail and Sanford can properly serve as a basis for rejecting claims 4 and 6 under 35 USC § 103(a). Applicant therefore requests that this rejection be withdrawn.

REJOINDER OF CLAIMS TO NON-ELECTED INVENTION

Currently withdrawn claims 7-10 require all of the limitations of claims 1 and 3-6, which are allowable for reasons presented the discussions above. Applicant therefore requests that

claims 7-10 be rejoined with claims 1 and 3-6, considered by the Examiner and allowed along with claims 1 and 3-6.

CONCLUSION

In view of the amendments proposed herein and in view of the observations and arguments presented herein, Applicant respectfully requests that the Examiner reconsider and withdraw the rejections stated in the outstanding Office Action and recognize all of the pending claims as allowable.

If unresolved matters remain in this application, the Examiner is invited to contact Frederick R. Handren, Reg. No. 32,874, at the telephone number provided below, so that these matters can be addressed and resolved expeditiously.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17, particularly, extension of time fees.

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Respectfully submitted,

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